

## Tongue & Lip Mobility Restriction



**Why can't that baby latch?**  
*The role of tongue and lip mobility restriction in breastfeeding problems*

Lisa Marasco, MA, IBCLC, FILCA

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**For babies, it's all about SUCK**



*The ability to get enough milk in a reasonable amount of time with a normal milk supply*

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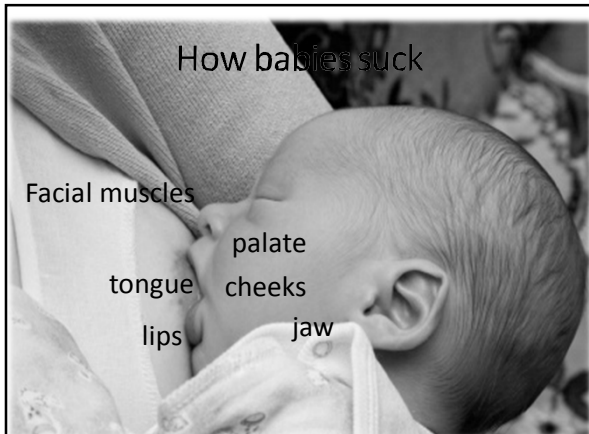
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**How babies suck**



Facial muscles

palate

tongue

cheeks

lips

jaw

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## Tongue & Lip Mobility Restriction

### How babies suck

#### Important players:

- Tongue- *cups to hold the breast, elevates & drops to create vacuum to draw out milk; grooves to help control milk bolus*
- Cheeks
- Facial muscles
- Jaw
- Palate- *plays a role in creating vacuum; also closes off nasopharynx for swallowing*
- Lips- *form seal to maintain vacuum*

Help stabilize breast

-also facilitates tongue drop to draw milk

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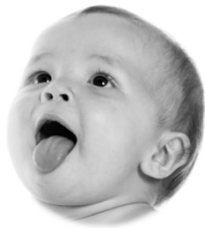
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### Tongue mobility:

an essential ingredient for suck

With mouth open, must be able to:

- ✓ Maintain extension
- ✓ Elevate
- ✓ Lateralize
- ✓ Cup
- ✓ Spread



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### Tongue also helps shape the palate

Restrictions can cause:

Bubble palate

High arched palate

Narrow palate



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## Tongue & Lip Mobility Restriction

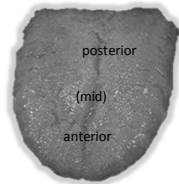
The unappreciated role of the  
*posterior* (back) tongue

Rise and drop creates vacuum to  
draw out milk

Bolus control

Swallowing

Airway protection



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What happens if not all parts of the  
tongue can move properly and freely?

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**If lingual frenulum is too restrictive,  
tongue may not:**

- ✓ *Extend* far enough to adequately grasp  
and stabilize breast
- ✓ *Cup* well enough to hold breast,  
maintain seal
- ✓ *Elevate* sufficiently to create necessary  
vacuum

**Mid-posterior tongue vs Tip**

- ✓ *Control milk bolus/swallowing*

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## Tongue & Lip Mobility Restriction

### What is tongue-tie?

*Embryological remnant of tissue in the midline between the undersurface of the tongue and the floor of the mouth that restricts normal tongue movement*

-International Affiliation of Tongue-tie Professionals (IATP)



Toronto 2010 meeting

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### What causes tongue-tie?

*Failure of the tongue to separate completely from the floor of the mouth during pregnancy, leaving a piece of tissue that restricts full tongue motion and movement.*

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### More facts

- Medical term *ankyloglossia*
- Variation of a midline defect
- More fairly defined as a restriction of tongue mobility by a tight frenulum
- Classical definition focused on tongue *extension*
- Affects between 1-10% of all babies
- Affects twice as many boys as girls
- Often runs in families

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## Tongue & Lip Mobility Restriction

### Assessing Suck

#### Visual

- ✓ Anatomy
- ✓ Risk factors

#### Digital

- ✓ Tongue contact
- ✓ Seal
- ✓ Cupping
- ✓ Vacuum

#### FUNCTION at breast

- ✓ Ability to transfer available milk

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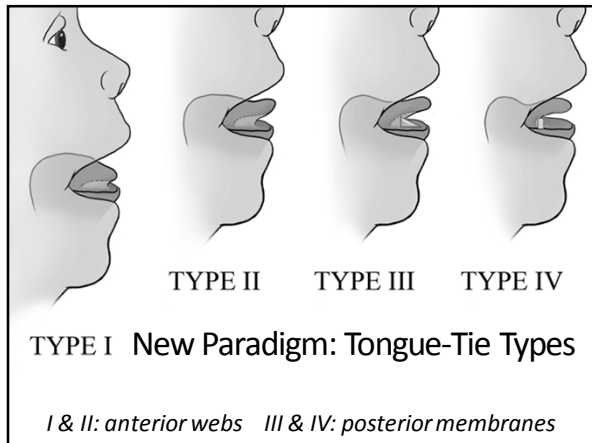
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### Classic Type 1



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## Tongue & Lip Mobility Restriction

Type 2



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### Posterior tongue-tie: fad or fact?

- Only recently identified
- Tends to be thicker and partially or completely “underground” (submucosal)
- Incidence has not been studied
- Gender distribution 1:1  
(Knox et al, poster presentation)

Dollberg, S., & Botzer, E. (2011). Neonatal tongue-tie: myths and science]. *Harefuah*, 150(1), 46.  
Knox, J. (2010). Tongue Tie and Frenotomy in the Breastfeeding Newborn. *Neoreviews*, 11(9), e513-519.  
Hong, P., Lago, D., Seargeant, J., Pellman, L., Magit, A. E., & Pransky, S. M. (2010). Defining ankyloglossia: A case series of anterior and posterior tongue ties. *Int J Pediatr Otorhinolaryngol*.  
Chu, M. W., & Bloom, D. C. (2009). Posterior ankyloglossia: a case report. *Int J Pediatr Otorhinolaryngol*, 73(6), 881-883.

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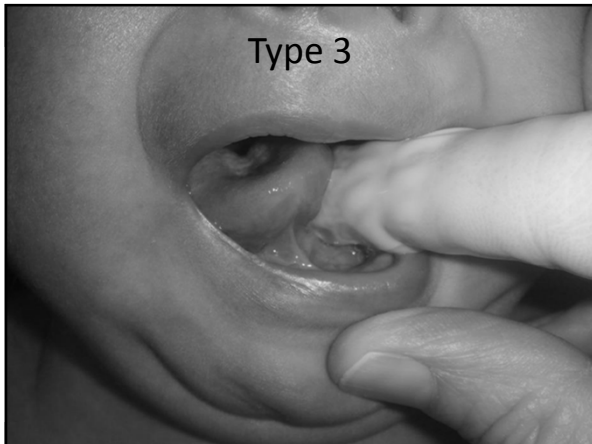
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Type 3



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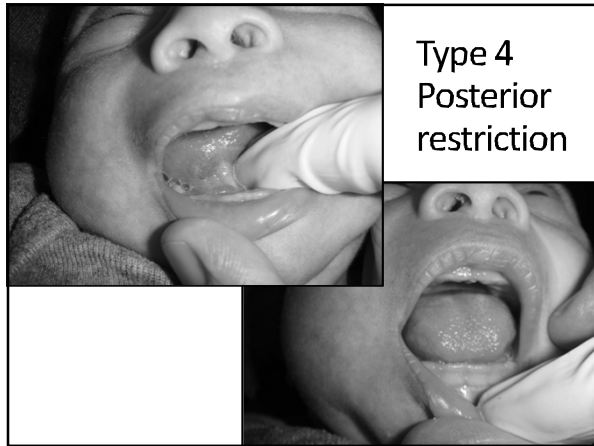
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## Tongue & Lip Mobility Restriction



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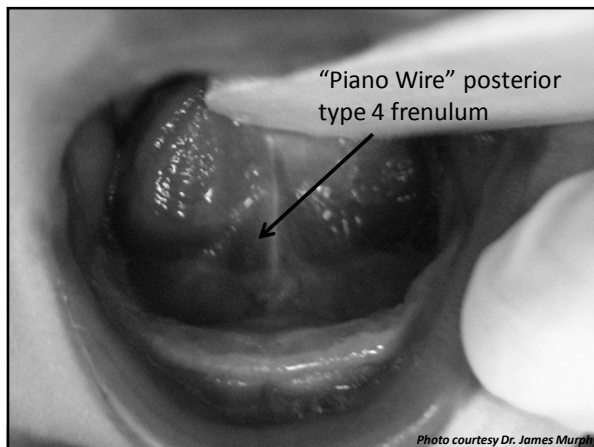
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## Tongue & Lip Mobility Restriction

**Function:** *How well does mother's breast anatomy fit with baby's oral anatomy and issues?*

Breast size	
Breast density	Small gape
Engorgement	Tongue curl back
Breast pliability	Bunched tongue blocking
Bulbous areola?	Tongue thrust
Nipple length	Tongue retractions
Nipple diameter	
Nipple Inverted or retracting	

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### Red Flags



Persistent sucking blisters ☹️

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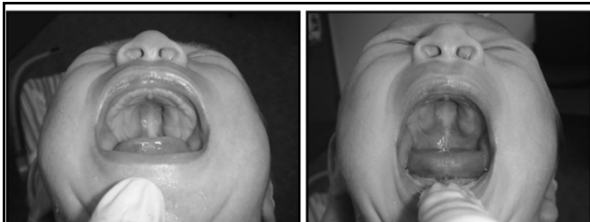
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### Red Flags

Bubble Palates



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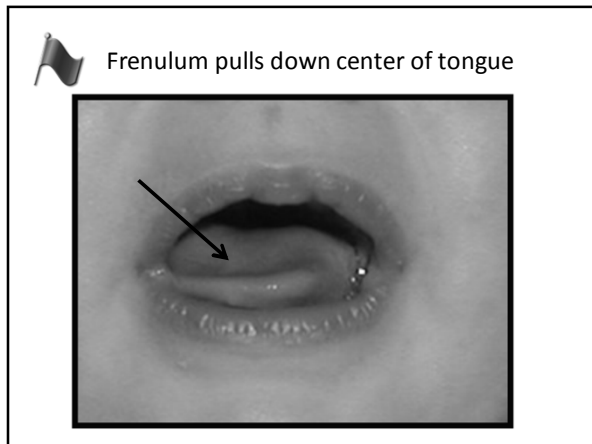
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## Tongue & Lip Mobility Restriction



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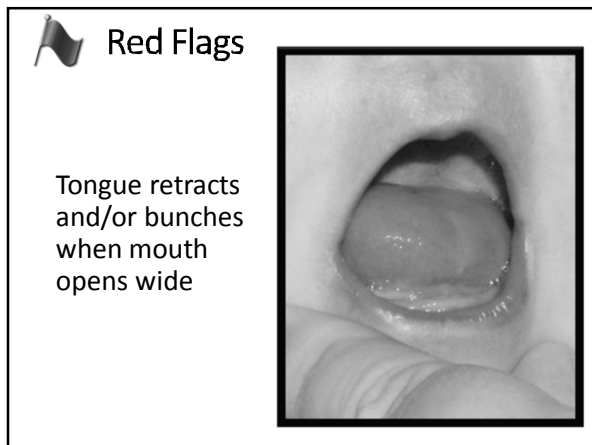
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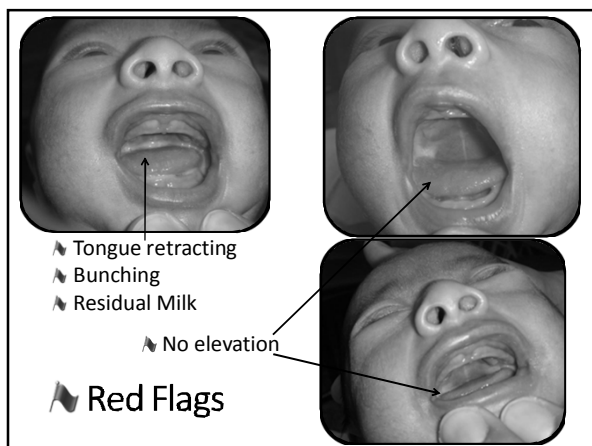
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## *Tongue & Lip Mobility Restriction*



### Tongue Mobility Red Flags



Tongue-thrusting ☸

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### Red Flags



Frequent clicking, coming off, regardless of flow;  
Slips off breast if moved ☸

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### Red Flags



Frequent choking, sputtering & pulling away  
“Juicy” breathing as feed progresses ☸

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## Tongue & Lip Mobility Restriction

 Red Flags



Fatiguing

Frequent rests ☹️

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 Red Flags



Frequently feeds with eyes closed ☹️

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 Compensations for tongue mobility restriction

The "Budweiser frog" slurp latch



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## Tongue & Lip Mobility Restriction



Mother says...

- *I must not have enough milk, because..*
- *He wants to eat all the time*
- *He falls asleep at the breast*
- *He is never content...*
- *He doesn't want my breast*
- *He wants the bottle*
- *He's killing me every time he gets on!*

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### Tongue-tie: Strategy

#### The controversy: Clip now or wait till later?

*How hard is baby working?*

*How hard is mom working?*

*Pain?*

#### It's not just about breastfeeding!

- ☐ Potential future consequences
- ☐ Clues from family background
- ☐ Risks vs Benefits assessment

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## Tongue & Lip Mobility Restriction

### Potential problems when not treated:

#### *Breastfeeding*

##### *Baby*

- Difficulty latching
- Clicking (suction breaks) with air swallowing
- Aspirating (breathing in) milk
- Early fatiguing resulting in need to feed very often
- Long feedings, baby never satisfied
- Poor weight gain

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### Potential problems: *Breastfeeding*

#### *Mom*



- ✓ Sore nipples
- ✓ Plugged ducts & breast infections from poor drainage
- ✓ Low milk supply
- ✓ *Frustration, feelings of helplessness, depression from pain, long feeds, work of pumping, etc.*

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### Potential problems: *Bottle-feeding & Solids*

Leaking milk from poor seal

Clicking & air swallowing

Choking from inability to control fast flow of bottle

Oral sensitivity to unfamiliar textures

Gagging and choking on foods



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## *Tongue & Lip Mobility Restriction*

### **Potential Problems: *Childhood and Adult***

Difficulty making certain sounds can result in problems with:

- ✓ Pronunciation (may need speech therapy)
- ✓ Quality of speech under stress
- ✓ Lack of control of rapid speech
- ✓ Rapid deterioration of speech with alcohol
- ✓ Tongue fatigue when speaking for periods of time

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### **Problems: *Childhood and Adult***

Tongue mobility restriction can cause:

- ✓ Crooked teeth
- ✓ Hypersalivation (Excessive drooling)
- ✓ Excessive cavities in teeth due to extra food particles not swept away by tongue
- ✓ Digestive problems such as reflux from air swallowing, poorly chewed foods
- ✓ Difficulty swallowing foods
- ✓ Difficulty or inability to whistle, play a wind instrument, lick ice cream cone, french kiss

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### **Problems: *Childhood and Adult***

- ✓ Poor oral airway development, airway obstruction, snoring, sleep apnea
- ✓ Lowered self-esteem
  - Who wants to kiss a dribbly child?
  - Eating issues: messy table manners, sloppy feeding, sensitivity to food
  - Teasing about speech, “splashing” when talking vehemently sloppy eating, etc. may lead to depression, anger, social withdrawal
  - Stigma of being different, sent to speech at school
- ✓ May ultimately limit career opportunities!

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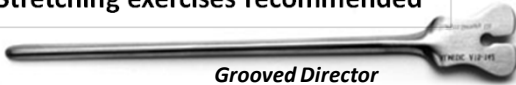
## Tongue & Lip Mobility Restriction

### Tongue-tie: Strategy

#### **Frenotomy** – supported by research

- Can usually be done in office
- Minimal anesthetic
- Anteriors have very little blood
- Posteriors may have a little more blood
- Improvement usually immediate

#### **Stretching exercises recommended**



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### Politics and Egg Shells: What can I say? What should I *not* say?

#### *It depends on*

- Your job setting and job description
- Your relationship with other HCPs
  - Who is in your corner?
- Wording is everything
- Use the evidence and document
- Reports vs telephone vs in-person
- Track your own stats
- Change happens slowly

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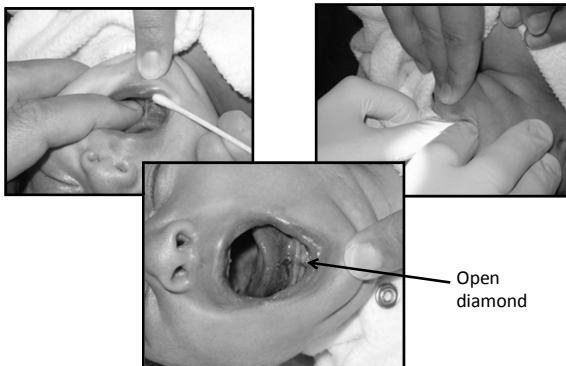
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### Simple frenotomy



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## Tongue & Lip Mobility Restriction




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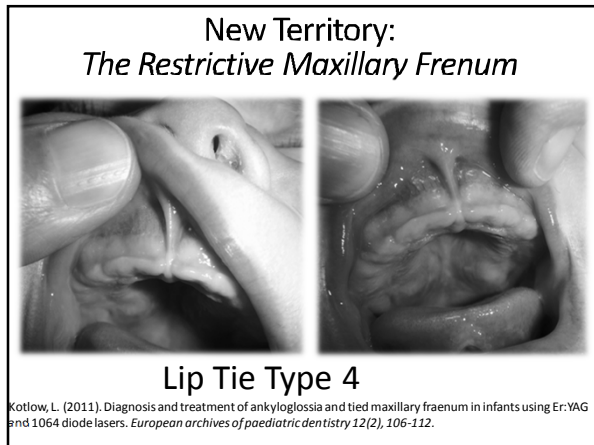
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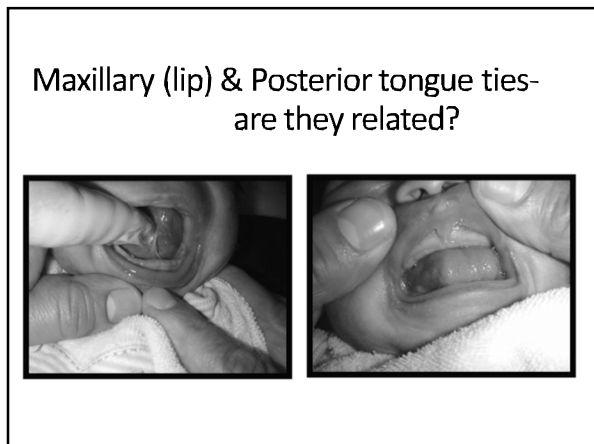
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## Tongue & Lip Mobility Restriction

**A dental issue**





Kotlow, L. A. (2010). The influence of the maxillary frenum on the development and pattern of dental caries on anterior teeth in breastfeeding infants: prevention, diagnosis, and treatment. *JHL*, 26(3), 304-308.

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Before                      After

**Tight maxillary frenum**

*Some mothers never do well until baby is at breast with 100% sucking ability*

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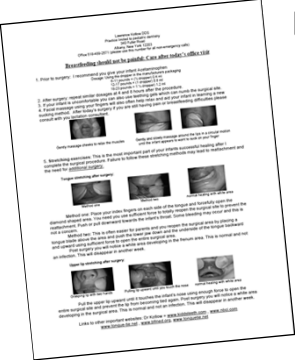
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**Ensuring Success**

- Get it all
- Post-procedure stretching
- Breastfeed!

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## Tongue & Lip Mobility Restriction

Compensate until baby can do his job



Pumping is often essential to maintain supply

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Helping Baby do his job better

- ✓ Position changes
- ✓ Asymmetric latch
- ✓ Sandwiching
- ✓ Breast compression
- ✓ Paced feeds
- ✓ Exercises
- ✓ Therapies
- ✓ Tincture of time

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Helping Baby when the tongue gets  
Tongue tip obstructing entry in the way

- ✓ Skin to skin facilitates drop of tongue
- ✓ Suck training before feed

Tongue retracted

- ✓ Skin to skin
- ✓ Massage forward

Tongue humped/blocking

- ✓ Massage forward
- ✓ Suck train or finger-feed with counter pressure

Nipple Shields



Genna- Supporting Sucking Skills

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## Tongue & Lip Mobility Restriction

*If a bottle is necessary...*



*use it to teach breastfeeding skills*

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## Craniosacral/Chiro/Speech Therapy



Appropriate for soft-tissue restrictions, nerve compressions, traumatic birth

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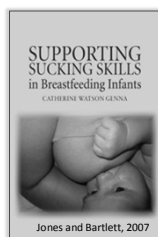
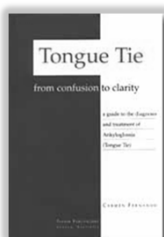
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## Resources

<http://www.kiddsteeth.com/articles.html>

<http://www.brianpalmerdds.com>

<http://www.mobimotherhood.org/MM/default.aspx>

<http://tongue-tied.net/> Int'l Affiliation of Tongue-tie Professionals

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